

In a method for determining the frame rate and exposure time for each frame of a video collection, an image capture system acquires at least two successive frames of a scene, separated in time. The two images are compared to determine if objects in the scene are in motion. If motion is detected, then the speed and displacement of the objects that are moving is determined. If the speed of the fastest moving object creates an unacceptable amount of image displacement, then the frame rate for the next frame is changed to one that produces an acceptable amount of image displacement. Also, if the speed of the fastest moving object creates an unacceptable amount of motion blur, then the exposure time for the next frame is changed to one that produces an acceptable amount of motion blur.